

## CURRICULUM VITAE: ANDREW ALLAN POTTER

### ADDRESS

Home  
521 Dalhousie Cres.  
Saskatoon, Saskatchewan  
Canada, S7H 3S5 (306) 955-3697

Office  
V.I.D.O.  
124 Veterinary Road  
Saskatoon, Saskatchewan  
Canada, S7N 0W0 (306) 966-7484  
Email: potter@sask.usask.ca  
Web: <http://www.usask.ca/~pottera>

### ACADEMIC BACKGROUND

B.Sc. (Biology) 1977 Carleton University, Ottawa, Ontario, Canada  
Ph.D. (Microbiology) 1981 University of Otago, Dunedin, New Zealand

### EMPLOYMENT

**1994-Present:** Associate Director, Science, Veterinary Infectious Disease Organization.

**1992-1994:** Manager, Preclinical Research, Veterinary Infectious Disease Organization.

**1987-1992:** Program Manager, Bacteriology, Veterinary Infectious Disease Organization.

**1985-1987:** Research Scientist, Veterinary Infectious Disease Organization.

**1985-Present:** Adjunct Professor, Western College of Veterinary Medicine, University of Saskatchewan.

**1984-1985:** NSERC Visiting Research Fellow, Department of National Health and Welfare, Ottawa, Ontario. Working on mechanisms of mutagenesis, cloning of bacterial DNA repair genes in *Saccharomyces cerevisiae*.

**1983-1984:** Consultant, Ministry of Science and Technology, Republic of the Philippines, and Adjunct Professor, University of the Philippines, Los Banos, Philippines (UPLB). This position involved setting up molecular biology laboratories and research programs at the National Institutes for Biotechnology and Applied Microbiology (BIOTECH), Los Banos, Philippines plus teaching advanced microbiology courses at UPLB.

**1981-1983:** Postdoctoral Fellow, Carleton University, Ottawa, Ontario. Research on plasmid-specified and chromosomal replication genes of *E. coli* plus DNA repair genes of *S. typhimurium* was carried out in the laboratory of Professor M. N. Iyer.

**1977-1981:** Scientific Officer, Department of Microbiology, University of Otago, Dunedin, New Zealand; Ph.D. student in the laboratory of Professor John Loutit. Working on the molecular genetics of pyrimidine metabolism and DNA synthesis in *Pseudomonas aeruginosa*.

## RESEARCH ACTIVITIES

**1990-Present:** Member, Canadian Bacterial Diseases Network, NSERC Center of Excellence.

**1985-Present:** My laboratory is working in the following general areas:

- Pathogenesis of *Pasteurella haemolytica* and *Haemophilus somnus* infections in cattle.
- Development of subunit vaccines for *P. haemolytica* and *H. somnus*.
- Pathogenesis of streptococcal bovine mastitis.
- Development of vaccines for *Str. uberis*, *Str. dysgalactiae* and *Str. agalactiae*.
- Development of live attenuated bacterial vectors for use in poultry.
- Gene expression and secretion.
- Iron transport and metabolism by bacteria.

## AWARDS AND FELLOWSHIPS

May, 1991: Peat-Marwick High Tech Entrepreneur Award, Innovation & Scientific Breakthrough Category. Awarded for the development of a genetically-engineered vaccine for shipping fever pneumonia of feedlot cattle.

1984-1985: Natural Sciences and Engineering Research Council, Visiting Scientist Fellowship, Environmental Health Directorate, Health and Welfare Canada.

1978-1981: Medical Research Council of New Zealand Postgraduate Scholarship, University of Otago, Dunedin, New Zealand.

## COURSES TAKEN / CONTINUING EDUCATION

Leadership Effectiveness Training (L.E.T.): The Foundation for Participative Management and Employee Participation. University of Saskatchewan, January, 1988.

Conducting Employee Performance Appraisals. February, 1989.

Research Management Principles. University of Saskatchewan, March, 1991.

Market Focus Workshop. International Centre for Agricultural Science and Technology, February, 1994, Saskatoon, Sask.

Technical Management. Fred Pryor Seminars, September, 1997, Saskatoon, Sask.

## PROFESSIONAL ACTIVITIES

American Society for Microbiology (1977-present)  
Canadian Society of Microbiologists (1981-present)  
Genetics Society of Canada (1981-1987)  
International Society for Vaccines (1994-1995)  
Industry Canada Bioindustries National Sector Team (1996-present)

## PATENTS FILED

(All applications have been filed in the U.S.A., Europe, Canada, Mexico and selected other countries.)

Potter, A.A., Jiang, M. and MacLachlan, P.R. *Lactoferrin-binding protein of Streptococcus uberis*. Provisional patent filed in U.S.A. November, 1996.

Potter, A.A., Jiang, M. and MacLachlan, P.R. *CAMP factor gene of Streptococcus uberis*. Filed in U.S.A. February 1995.

Lo, R.Y.C., Schryvers, A.B. and Potter, A.A. *Transferrin binding proteins of Pasteurella haemolytica and vaccines containing same*. Filed in Canada (December 1, 1995) and provisional filed in U.S.A. (December 1, 1995).

Allan, B. and Potter, A.A. *Novel live bacterial vaccines*. Filed in the U.S.A., September 4, 1992.

Potter, A.A. and Harland, R.J. *Iron-regulated outer membrane proteins of Haemophilus somnus as vaccine components*. Filed in the U.S.A., June, 1992.

Potter, A.A. and Pontarollo, R. *Haemophilus somnus haemin-binding protein*. Filed in the U.S.A., July, 1992.

Potter, A.A., Pfeifer, C., and Pontarollo, R. *Haemophilus somnus haemolysin*. Filed in the U.S.A., July, 1992.

Potter, A.A., Theisen, M., and Harland, R.J. *Vaccines for Haemophilus somnus*. Filed in the U.S.A., April 8, 1992.

Potter, A.A., Gerlach, G., and Rossi-Campos, A. *Vaccines for Actinobacillus pleuropneumoniae*. Filed in the U.S.A., October 23, 1991.

Potter, A.A., Willson, Gerlach, G.F., Willson, P.J. and Rossi-Campos, A. *Actinobacillus pleuropneumoniae* transferrin-binding proteins and uses thereof. U.S. Patent # 5,521,072, May 28, 1996.

Potter, A.A., Redmond, M. and Hughes, H. *Use of the Pasteurella haemolytica leukotoxin as an immunological carrier*. Filed in the U.S.A., October 21, 1991.

Potter, A.A., Campos, M., and Hughes, H. *Construction and use of cytokine::leukotoxin gene fusions and resulting products*. Filed in the U.S.A., March 22, 1990.

Potter, A.A. *Compositions and treatments for pneumonia in cattle*. Filed in the U.S.A., April 7, 1989, #07/335,018. Describes vaccination against pneumonia of cattle and other animals using both authentic and recombinant antigens of *Pasteurella haemolytica*.

Potter, A.A. *Pasteurella haemolytica leukotoxin compositions and uses thereof*. U.S. Patent #5,476,657, December 19, 1995.

Sabara, M.I.J., Frenchick, P.J., Potter, A.A., Ijaz, M.K., and Gilchrist, J.E. *Peptides corresponding to antigenic and immunogenic determinants of major neutralizing proteins of rotaviruses*. Filed in U.S.A., September 3, 1986, #06/903,325. (status - abandoned)

## TECHNOLOGY TRANSFER

Development of recombinant and conventional vaccines for the prevention of *P. haemolytica* and *H. somnus* infection in cattle plus combination product; licensed for use in Canada, 1991. This represented the world's first licensed genetically-engineered vaccine for use in animals. (With Dr. R. Harland).

Development of a recombinant subunit vaccine for *A. pleuropneumoniae* infection in swine; licensing submission for field release in Canada made to Agriculture Canada, December, 1994. (With Dr.'s P. Willson, G. Gerlach).

## PUBLICATIONS

### In Preparation

Brooks, B.W., Lacroix, R.P., Potter, A.A., Attah-Poku, S., Kelly, H.A., Robertson, R.H. and J.R. Duncan. 1998. Some calcium dependent epitopes on native and recombinant leukotoxin induce toxin-neutralizing antibodies: Implications for potency assays for *Pasteurella haemolytica* vaccines and vaccine development.

Gomis, S.M., Riddell, C., Potter, A.A. and B.J. Allan. 1997. Phenotypic and genotypic characterization of *Escherichia coli* from broilers with cellulitis and other colibacillosis lesions.

Jiang, M., MacLachlan, P.R., Babiuk, L.A. and A.A. Potter. 1997. A bovine lactoferrin-binding protein of *Streptococcus uberis*: Identification of the protein and characterization of the gene. Infection and Immunity (in preparation).

Willson, P.J., Gerlach, G.-F., Klashinsky, S. and A.A. Potter. 1997. Cloning and characterization of NADPH-sulfite reductase hemoprotein gene from *Actinobacillus pleuropneumoniae* serotypes 1 and 5. (in preparation)

#### **Submitted for Publication**

Jiang, M., MacLachlan, P.R., Babiuk, L.A. and A.A. Potter. 1997. The *abp* locus of *Streptococcus uberis* encoding a protein homologous to polar amino acid and opine binding proteins of gram-negative bacteria. Canadian Journal of Microbiology (submitted September 1997).

Gomis, S.M., Godson, D.L., Wobeser, G.A. and A.A. Potter. 1997. Intracellular survival of *Haemophilus somnus* in bovine blood monocytes and alveolar macrophages. Microbial Pathogenesis (submitted July 1997).

Huang, H.S., Potter, A.A., Campus, M., Leighton, F.A., Willson, P., Haines, D. and W.D.G Yates. 1997. The study of the pathogenesis of porcine *Actinobacillus pleuropneumoniae*: Part II. Roles of proinflammatory cytokines.

Rioux, C.R., Rawlyk, N.A., Theisen, M., and A.A. Potter. 1997. Molecular cloning, sequence and expression of *lppC*, encoding a 60-kilodalton lipoprotein of *Haemophilus somnus*. Infection and Immunity (submitted July, 1997).

Bunka, S., Potter, A.A. and G.-F. Gerlach. 1995. Cloning and sequencing of the transferrin-binding protein genes of *Actinobacillus pleuropneumoniae*, biotype 1-serotype 5 and biotype 2-serotype 2. Infection and Immunity.

#### **Accepted & Published Papers**

Huang, H.S., Potter, A.A., Campus, M., Leighton, F.A., Willson, P. and W.D.G Yates. 1998. Pathogenesis of porcine *Actinobacillus pleuropneumoniae*: Part I. Effects of different *Actinobacillus pleuropneumoniae* preparations *in vitro* and *in vivo*. Canadian Journal of Veterinary Research (accepted November, 1997).

- Gomis, S.M., Godson, D.L., Wobeser, G.A. and A.A. Potter. 1998. Effect of *Haemophilus somnus* on nitric oxide production and chemiluminescence response of bovine blood monocytes and alveolar macrophages. Microbial Pathogenesis (in press).
- Pontarollo, R.A., Rioux, C.R. and A.A. Potter. 1997. Cloning, characterization and expression of a lysozyme gene of bacteriophage origin from *Haemophilus somnus*. J. Bacteriology 179:1872-1879.
- Gomis, S.M., Godson, D.L., Beskorwayne, T., Wobeser, G.A. and A.A. Potter. 1997. Modulation of phagocytic function of bovine mononuclear phagocytes by *Haemophilus somnus*. Microbial Pathogenesis 22:13-21.
- Gomis, S.M., Goodhope, R., Kumar, L., Caddy, N., Riddell, C., Potter, A.A. and B.J. Allan. 1997. Isolation of *Escherichia coli* from cellulitis and other lesions of the same bird in broilers at slaughter. Canadian Veterinary Journal 38:159-162.
- Gomis, S.M., Watts, T., Riddell, C., Potter, A.A., and B.J. Allan. 1997. Experimental reproduction of *E. coli* cellulitis and septicemia in broiler chickens. Avian Diseases 41:234-240.
- Ngeleka, M., Kwaga, J.K.P., Potter, A.A., White, D.G. and B.J. Allan. 1996. *Escherichia coli* cellulitis in broiler chickens: Clonal relationships and analysis of virulence-associated factors or isolates from diseased birds. Infection and Immunity 64:3118-3126.
- Jiang, M., Babiuk, L.A. and A.A. Potter. 1996. Cloning, sequencing and expression of the CAMP factor gene of *Streptococcus uberis*. Microbial Pathogenesis 20:297-307.
- Van Donkersgoed, J., Guenther, C., Evans, B., Harland, R. and A.A. Potter. 1995. Effects of various vaccination protocols on passive and active immunity to *Pasteurella haemolytica* and *Haemophilus somnus* in beef calves. Canadian Veterinary Journal 36:424-429.
- Bunka, S., Christensen, C., Potter, A.A., Willson, P.W. and G.F. Gerlach. 1995. Cloning and characterization of a protective outer membrane lipoprotein (OmlA) of *Actinobacillus pleuropneumoniae* serotype 5. Infection and Immunity 63:2797-2800.
- Willson, P.J., Rossi-Campos, A. and A.A. Potter. 1995. Tissue reaction and immunity in swine immunized with *Actinobacillus pleuropneumoniae* vaccines. Canadian Journal of Veterinary Research 59:299-305.
- van den Hurk, J.V., Allan, B.J., Riddell, C. and A.A. Potter. 1994. The effect of exposure to hemorrhagic enteritis virus on susceptibility of turkeys to *Escherichia coli*. Avian Diseases 38:708-716.
- Van Donkersgoed, J., Janzen, E.D., Potter, A.A. and R.J. Harland. 1994. The occurrence of *Haemophilus somnus* in feedlot calves and its control by post-arrival prophylactic mass medication. Canadian Veterinary Journal 35:573-580.
- Kwaga, J., Allan, B.J., van den Hurk, J.V., Seidi, H., and A.A. Potter. 1994. A *carAB* mutant of avian pathogenic *Escherichia coli* serotype O2 is attenuated and effective as a live oral vaccine against colibacillosis in turkeys. Infection and Immunity 62:3766-3772.

Van Donkersgoed, J., Potter, A.A., Mollison, B. and R.J. Harland. 1994. The effect of a combined *Pasteurella haemolytica* and *Haemophilus somnus* vaccine and a modified-live bovine respiratory syncytial virus vaccine against enzootic pneumonia in young beef calves. *Canadian Veterinary Journal* 35:239-241.

Babiuk, L.A. and A.A. Potter. 1994. Veterinary Vaccines. *Biotechnol. Adv.* 12:489-523.

Hughes, H.P.A., Campos, M., McDougall, L., Beskorwayne, T.K., Potter, A.A. and L.A. Babiuk. 1994. Regulation of MHC class II expression by *Pasteurella haemolytica* leukotoxin. *Infection and Immunity* 62:1609-1615.

Van Donkersgoed, J., Schumann, F.J., Harland, R.J., Potter, A.A. and E.D. Janzen. 1993. The effect of route and dosage of immunization on the serological response to a *Pasteurella haemolytica* and *Haemophilus somnus* vaccine in feedlot calves. *Canadian Veterinary Journal* 34:731-735.

Gerlach, G.F., Anderson, C., Klashinsky, S., Rossi-Campos, A., Potter, A.A. and P.J. Willson. 1993. Molecular characterization of a protective outer membrane lipoprotein (OmlA) from *Actinobacillus pleuropneumoniae* serotype 1. *Infection and Immunity* 61:565-572.

Theisen, M., Rioux, C.R. and A.A. Potter. 1993. Molecular cloning, nucleotide sequence and characterization of *lppB*, encoding an antigenic 40-kilodalton lipoprotein of *Haemophilus somnus*. *Infection and Immunity* 61:1793-1798.

Allan, B., van den Hurk, J. and A.A. Potter. 1993. Characterization of *Escherichia coli* isolated from cases of avian colibacillosis. *Canadian Journal of Veterinary Research* 57:146-151.

Gerlach, G.F., Klashinsky, S., Anderson, C., Potter, A.A. and P.W. Willson. 1992. Characterization of two genes encoding distinct transferrin-binding proteins in different *Actinobacillus pleuropneumoniae* isolates. *Infection and Immunity* 60:3253-3261.

Pfeifer, C.G., Campos, M., Beskorwayne, T., Babiuk, L.A. and A.A. Potter. 1992. Effect of *Haemophilus somnus* on phagocytosis and hydrogen peroxide production by bovine polymorphonuclear leukocytes. *Microbial Pathogenesis* 13:191-202.

Harland, R.J., Potter, A.A., van Drunen-Littel-van den Hurk, S., Van Donkersgoed, J., Parker, M.D., Zamb, T.J. and E.D. Janzen. 1992. The effect of subunit or modified live bovine herpesvirus-1 vaccines on the efficacy of a recombinant *Pasteurella haemolytica* vaccine for the prevention of respiratory disease in feedlot calves. *Canadian Veterinary Journal* 33:734-741.

Potter, A.A. and L.A. Babiuk. 1992. Conventional and biotechnology-derived bovine vaccines. *Progress in Vaccinology* 4:240-287.

Rossi-Campos, A., Anderson, C., Gerlach, G.F., Klashinsky, S., Potter, A.A. and P.J. Willson. 1992. Immunization of pigs against *Actinobacillus pleuropneumoniae* with two recombinant protein preparations. *Vaccine* 10:512-518.

Theisen, M., Rioux, C.R. and A.A. Potter. 1992. Molecular cloning, nucleotide sequence and characterization of a 40 000 molecular weight lipoprotein of *Haemophilus somnus*. *Infection and*

Gerlach, G.F., Anderson, C., Potter, A.A., Klashinsky, S., and P.J. Willson. 1992. Cloning and expression of a transferrin-binding protein from *Actinobacillus pleuropneumoniae*. *Infection and Immunity* 60:892-898.

Hughes, H.P.A., Campos, M., Potter, A.A. and L.A. Babiuk. 1992. Molecular chimerization of *Pasteurella haemolytica* leukotoxin to interleukin-2: Effects on cytokine and antigen function. *Infection and Immunity* 60:565-570.

Theisen, M. and A.A. Potter. 1992. Cloning, sequencing, expression and functional studies of a 15,000 molecular weight *Haemophilus somnus* antigen similar to *Escherichia coli* ribosomal protein s9. *Journal of Bacteriology* 174:17-23.

Anderson, C., Potter, A.A. and G.F. Gerlach. 1991. Isolation and molecular characterization of spontaneously occurring cytolysin-negative mutants of *Actinobacillus pleuropneumoniae* serotype 7. *Infection and Immunity* 59:4110-4116.

Bielefeldt Ohmann, H., McDougall, I., and A.A. Potter. 1990. The secondary *in vitro* B lymphocyte (antibody) response to microbial antigens: use in appraisal of vaccine immunogenicity, and cytokine regulation. *Vaccine* 9:170-176.

Styrt, B., Walker, R.D., Dahl, L.D. & A.A. Potter. 1990. Time and temperature dependence of granulocyte damage by leucotoxic supernatants from *Pasteurella haemolytica* A1. *Journal of General Microbiology* 136:2173-2178.

Deneer, H.G. and A.A. Potter. 1989. A maltose-inducible outer membrane protein of *Actinobacillus pleuropneumoniae*. *Microbial Pathogenesis* 6:425-432.

Deneer, H.G. and A.A. Potter. 1989. Effect of iron restriction on the outer membrane proteins of *Actinobacillus (Haemophilus) pleuropneumoniae*. *Infection and Immunity* 57:798-804.

Deneer, H.G. and A.A. Potter. 1989. Iron-repressible outer membrane proteins of *Pasteurella haemolytica*. *Journal of General Microbiology* 135:435-443.

Willson, P.J., Deneer, H.G., Potter, A.A., and W. Albritton. 1989. Characterization of a streptomycin-sulfonamide resistance plasmid from *Actinobacillus pleuropneumoniae*. *Antimicrobial Agents and Chemotherapy* 33:235-238.

Potter, A.A., Ready, K., and J. Gilchrist. 1988. Purification of fimbriae from *Pasteurella haemolytica* A-1. *Microbial Pathogenesis* 4:311-316.

Gifford, G.A., Potter, A.A., and L.A. Babiuk. 1988. Clinical and pathological evaluation of sulbactam/ampicillin for treatment of experimental bovine pneumonic pasteurellosis. *Canadian Veterinary Journal* 29:142-148.

Potter, A.A., Cox, G., Parker, M., and L.A. Babiuk. 1987. The complete nucleotide sequence of bovine rotavirus C486 gene 4 cDNA. *Nucleic Acids Research* 15:4361.



- Nestmann, E.R., Kowbel, D.J., and A.A. Potter. 1986. The effect of 2-micron DNA on survival and mutagenesis in *Saccharomyces cerevisiae*. Canadian Journal of Genetics and Cytology 28:154-160.
- Potter, A.A., Hanham, A.F., and E.R. Nestmann. 1985. A rapid method for the extraction and purification of DNA from human leukocytes. Cancer Letters 26:335-341.
- Potter, A.A. 1985. Gene cloning in *Pseudomonas aeruginosa*. In *Recombinant DNA Methodology*, J.R. Dillon, A. Nasim and E.R. Nestmann (eds.). John Wiley and Sons, New York, p.147-156.
- Potter, A.A., Nasim, A., Zitomer, R.S. and C.P. Hollenberg. 1985. Gene cloning in *Saccharomyces cerevisiae*. In *Recombinant DNA Methodology*, J.R. Dillon, A. Nasim and E.R. Nestmann (eds.). John Wiley and Sons, New York, p.127-146.
- Potter, A.A., Nestmann, E.R., and V.N. Iyer. 1984. Introduction of the plasmid pKM101-associated *muc* genes into *Saccharomyces cerevisiae*. Mutation Research 131:197-204.
- Potter, A.A., Selvaraj, G., Nestmann, E.R., and V.N. Iyer. 1983. Improved Salmonella tester strain carrying a pKM101-derived plasmid. Mutation Research 122:7-12.
- Potter, A.A. and V.N. Iyer. 1983. Identification of a *dnaB*-analogue function associated with plasmid R100*drd1*. Journal of Bacteriology 153:1308-1314.
- Potter, A.A. 1983. *Agrobacterium tumefaciens*, crown gall disease and implications for the genetic manipulation in plants. Gen. Soc. Can. Bull. 14:2-4
- Potter, A.A. and J.S. Loutit. 1983. Isolation of *Pseudomonas aeruginosa* mutants with increased thymine salvage. Canadian Journal of Genetics and Cytology 25:518-523.
- Potter, A.A. and J.S. Loutit. 1983. FP2 plasmid curing in *Pseudomonas aeruginosa*. Canadian Journal of Microbiology 29:732-734.
- Potter, A.A. and J.S. Loutit. 1982. Exonuclease activity from *Pseudomonas aeruginosa* which is missing in phenotypically restrictionless mutants. Journal of Bacteriology 151:1204-1209.
- Potter, A.A., Musgrave, D.R., and J.S. Loutit. 1982. Thymine metabolism in *Pseudomonas aeruginosa* strain 1: the presence of a salvage pathway. Journal of General Microbiology 128:1391-1400.

## OTHER WRITTEN PUBLICATIONS

- Potter, A.A. 1997. Pasteurellosis. Alberta Feedlot Management Guide. AARI, Edmonton, Alberta.
- Harland, R.J. and A.A. Potter. 1991. Development of vaccines for feedlot cattle. The Cattle Feeder 2:2-3.
- Potter, A.A., D.R. Musgrave, R.J. Harland, and S. Klichinsky. 1995. Vaccination against *Streptococcus suis*

## CONFERENCE PAPERS

Potter, A.A., Kournikakis, B., Brownlie, R. and M. Baca-Estrada. 1997. Mucosal vaccines for pneumonic plague. USA/UK/Canada Plague Meeting, Fort Detrick, Frederick, Maryland, December, 1997.

Brooks, B., Lacroix, R., Potter, A.A., Attah-Poku, S., Kelly, H., Robertson, R. and J.R. Duncan. 1997. Factors that influence antibody binding to native and recombinant leukotoxin: Implications for potency assays for *Pasteurella haemolytica* vaccines and vaccine development. Veterinary Vaccines, Madison, Wisconsin, July, 1997.

Jiang, M., MacLachlan, P.R., and A.A. Potter. 1997. Characterization of a lactoferrin-binding protein of *Streptococcus uberis* and its corresponding gene. American Society for Microbiology Annual Meeting, May 1997, Miami, Florida.

Collinson, S.K., Allan, B., Potter, A.A. and W.W. Kay. 1997. Analysis of the virulence of *Salmonella enteritidis* fimbrial mutants and carbohydrate-utilization mutants using a day-old chick model. CBDN Annual Meeting, June, 1997, Montebello, Quebec.

Allan, B.J. Gomis, S.M., Riddell, C., Kumor, L. and A.A. Potter. 1997. Isolation of *Escherichia coli* from cellulitis lesions and other tissues. CBDN Annual Meeting, June 1997, Montebello, Quebec.

Gomis, S., Goodhope, B., Kumor, L., Caddy, N., Riddell, C., Potter, A.A. and B.J. Allan. 1996. Characteristics of *Escherichia coli* isolated from multiple tissues in broilers condemned for cellulitis. American Association of Avian Pathologists, AVMA, Louisville, KY, U.S.A. July 20-24, 1996.

Potter, A.A., Schryvers, A.B., Lo, R.Y.C. and T. Watts. 1996. Protective capacity of *Pasteurella haemolytica* transferrin-binding proteins. CBDN Annual Meeting, May 1996, Kananaskis, Alberta, Canada.

Gomis, S.M., Watts, T., Riddell, C., Potter, A.A. and B.J. Allan. 1996. Experimental reproduction of *E. coli* cellulitis and septicemia in broiler chickens. UAUC Meeting, May 1996, Kananaskis, Alberta, Canada.

Huang, H.S., Potter, A.A., Campos, M., Leighton, F.A., Willson, P., Lees, J. and W.D.G. Yates. 1995. Effects of different *Actinobacillus pleuropneumoniae* preparations in vitro and in vivo. CVMA Annual Meeting, June, 1995, Victoria, British Columbia, Canada.

Huang, H.S., Potter, A.A., Campos, M., Leighton, F.A., Willson, P., Haines, D. and W.D.G. Yates. 1995. Roles of proinflammatory cytokines in *Actinobacillus pleuropneumoniae* infection in swine. CVMA Annual Meeting, June, 1995, Victoria, British Columbia, Canada.

Potter, A.A. 1995. Bovine Vaccines. Canadian Bacterial Diseases Network Annual Meeting, June, 1995, Quebec City, Quebec, Canada. (invited talk)

Jiang, M., Babiuk, L.A. and A.A. Potter. 1995. Cloning, nucleotide sequence and expression of the CAMP factor gene from *Streptococcus uberis*. Canadian Society for Microbiologists Annual Meeting, June, 1995,

Ngeleka, M., Potter, A.A. and B. Allan. 1995. Generation and evaluation of *Escherichia coli fur* mutants as vaccine candidates to prevent colibacillosis in poultry. North Central Avian Disease Conference, August, 1995, Minneapolis, MN, U.S.A.

Gomis, S., Godson, D.L., Hughes, H., Wobeser, G and A.A. Potter. 1994. *H. somnus*-bovine mononuclear cell interactions at the cellular level: Analysis of bacteria-phagocyte interactions by flow cytometry. Canadian Association of Veterinary Pathologists Annual Meeting, July, 1994, Quebec City, Quebec, Canada.

Gomis, S., Chen, W., Godson, D., Hughes, H. and A.A. Potter. 1994. Intracellular survival of *H. somnus* in bovine blood monocytes: effects of cytokine and LPS treatment. HAP Meeting, August, 1994, Edinburgh, Scotland.

Rioux, C.R., Harland, R.J., Theisen, M., Rawlyk, N.A. and A.A. Potter. 1994. Protective capacity of the antigenic 40-kilodalton LppB lipoprotein of *Haemophilus somnus* against experimental infection in cattle. HAP Meeting, August, 1994, Edinburgh, Scotland.

Pontarollo, R.A., Rioux, C.R. and A.A. Potter. 1994. Bacteriophage genes from *Haemophilus somnus*: homology to genes from bacteriophages P2 and HP1. HAP Meeting, August, 1994, Edinburgh, Scotland.

Pontarollo, R.A., Rioux, C.R. and A.A. Potter. 1994. Cloning and characterization of a bacteriophage lysozyme gene from *Haemophilus somnus*. HAP Meeting, August, 1994, Edinburgh, Scotland.

Allan, B., Kwaga, J., Ngeleka, M., van den Hurk, J. and A.A. Potter. 1994. Live attenuated *E. coli* vaccines for poultry and their use as vectors for delivery of heterologous antigens. CBDN Annual Meeting, June 15-17, 1994, Vancouver, Canada.

Rioux, C.R., Rawlyk, N., Crockford, G. and A.A. Potter. 1994. Cloning and characterization of *Haemophilus somnus* genes coding for proteins involved in iron metabolism. CBDN Annual Meeting, June 15-17, 1994, Vancouver, Canada.

Willson, P.J., Potter, A.A., Harland, R.J. and S. Klashinsky. 1994. Vaccination with a subunit bacterin reduces mortality due to *Streptococcus suis* in an endemically infected herd. C.V.M.A. 46th Annual Convention, (Abst 46:420), St. Johns, Canada.

Van Donkersgoed, J., van Drunen-Littel-van den Hurk, S., Harland, R.J., Kowalski, J., van den Hurk, J., Aitchison, B., Potter, A.A., Babiuk, L.A. and Zamb, T. 1993. Effectiveness of a subunit BHV-1 vaccine against experimentally-induced IBR. Canadian Veterinary Medical Association 45<sup>th</sup> Annual Meeting, July, Edmonton, Alberta, Canada.

Gomis, S., Van Donkersgoed, J., Harland, R., Potter, A.A. and D Heins. Immunohistochemical demonstration of the distribution of *Haemophilus somnus* in feedlot calves after an experimental infection. Proceeding of the American College of Veterinary Pathologists, December.

Van Donkersgoed, J., Janzen, E.D., Harland, R.H. and A.A. Potter. 1993. The efficacy of post-arrival mass medication with long-acting oxytetracycline for prophylaxis of hemophilosis in feedlot calves. Canadian Veterinary Medical Association 45<sup>th</sup> Annual Meeting, July, Edmonton, Alberta, Canada.

Willson, P.J., Potter, A.A., Gerlach, G.-F., Rollins, M. and J.S. Lees. 1993. Recombinant *Actinobacillus pleuropneumoniae* vaccine protects pigs against experimental challenge. Canadian Veterinary Medical Association 45<sup>th</sup> Annual Meeting, July, Edmonton, Alberta, Canada.

Rioux, C.R., Rawlyk, N.A., Theisen, M. and A.A. Potter. 1993. Cloning, characterization and overexpression of *lppC*, a gene encoding an antigenic 60 kilodalton lipoprotein of *Haemophilus somnus*. 93<sup>rd</sup> General Meeting of the American Society for Microbiology, May, Atlanta, Georgia, U.S.A.

Hughes, H.P.A., Potter, A.A., Campos, M. and L.A. Babiuk. 1993. Modulation of MHC class II expression by *Pasteurella haemolytica* leukotoxin. Canadian Society of Immunology Annual Meeting, March, 1993, Lake Louise, Alberta, Canada.

Kwaga, J., Allan, B.A., Potter, A.A. and H. Seida. 1993. Construction and characterization of *Escherichia coli* *carAB* mutants for use as candidate vaccine strains against colibacillosis. Canadian Society of Microbiologists Annual Meeting, August, 1993, Toronto, Canada.

Allan, B., Kwaga, J., van den Hurk, J., Riddell, C. and A.A. Potter. 1993. Candidate vaccine strains for the prevention of colibacillosis. 42<sup>nd</sup> Western Poultry Disease Conference, March, 1993, Sacramento, California.

Harland, R.J., McCartney, D.H. and A.A. Potter. 1992. Evaluation of *P. haemolytica* vaccination strategies in beef calves. Conference for Research Workers in Animal Disease. November, 1992, Chicago, IL, U.S.A.

Harland, R.J., McCartney, D.H., Potter, A.A. and D.L. Godson. 1992. Interaction between a modified live virus (MLV) IBR-PI3 vaccine and a subunit antigen. Conference for Research Workers in Animal Disease. November, 1992, Chicago, IL, U.S.A.

Potter, A.A. 1992. BRD Vaccines. Canadian Society for Microbiology Western Meeting. October, 1992, Calgary, Alberta, Canada (invited speaker).

Potter, A.A., Hughes, H. and R.J. Harland. 1992. Recombinant vaccines for *Pasteurella haemolytica*. International Symposium on Pasteurellosis in Production Animals. August, 1992, Bali, Indonesia.

Gerlach, G.F., Anderson, C., Rossie-Campos, A. and A.A. Potter. 1992. The role of the 103kd *Actinobacillus pleuropneumoniae* cytolysin in virulence and the association of the encoding gene with insertion sequence-like elements. International Swine Veterinary Symposium. August, 1992, The Hague, Netherlands.

Rossi-Campos, A., Campos, M. and A.A. Potter. 1992. *Actinobacillus pleuropneumoniae*: Modulation of Pathogenesis by Recombinant Interferon. International Swine Veterinary Symposium. August, 1992, The Hague, Netherlands.

Potter, A.A. 1992. Bovine Vaccines. Canadian Bacterial Diseases Network Annual Meeting. June, 1992, Kananaskis, Alberta, Canada (invited speaker).

Rioux, C.R., Theisen, M. and A.A. Potter. 1992. Cloning and Characterization of *lppC*, a Gene Encoding an Antigenic 60,000 MW Lipoprotein of *Haemophilus somnus*. UA/UC Meeting on Infectious Diseases. June, 1992, Kananaskis, Alberta, Canada.

Pfeifer, C.G., Campos, M., Beskorwayne, T., Babiuk, L.A. and A.A. Potter. 1992. Effect of *Haemophilus somnus* on phagocytosis and hydrogen peroxide production by bovine polymorphonuclear leukocytes. UA/UC Meeting on Infectious Diseases. June, 1992, Kananaskis, Alberta, Canada.

Pontarollo, R., Babiuk, L.A. and A.A. Potter. 1992. Cloning and expression of a gene coding for a hemin-binding protein of *Haemophilus somnus*. UA/UC Meeting on Infectious Diseases. June, 1992, Kananaskis, Alberta, Canada.

Willson, P.J., Potter, A.A. and C.S. Rhodes. 1992. Spread and control of *Streptococcus suis* in swine herds in western Canada. Canadian Veterinary Medicine Association Annual Meeting. June, 1992, St. Johns, Nfld.

Gerlach, G.-F., Klashinsky, S., Anderson, C., Potter, A.A. and P. Willson. 1992. Distribution and Heterogeneity of the Transferrin Binding Proteins of *Actinobacillus pleuropneumoniae*. American Society for Microbiology Annual Meeting. May, 1992, New Orleans, La.

Theisen, M., Rioux, C.R. and A.A. Potter. 1992. Cloning and Characterization of *lppB*, a Gene Encoding an Antigenic 40,000 MW Lipoprotein of *Haemophilus somnus*. American Society for Microbiology Annual Meeting. May, 1992, New Orleans, La.

Hughes, P.A., Campos, M., Potter, A.A. and L.A. Babiuk. 1992. Characterization and Function of Antigen-Cytokine Chimeras. FASEB Meeting. April, 1992, Anaheim, CA, U.S.A.

Hughes, P.A., Campos, M., Potter, A.A. and L.A. Babiuk. 1992. Functional Characterization of Antigen-Cytokine Chimeric Proteins and Their Projected Use in Vaccine Formulation. Canadian Society for Immunology Annual Meeting. March, 1992, Mont Rolland, Quebec, Canada.

Harland, R.J., Schuh, J. and A.A. Potter. 1992. Experimental *Haemophilus somnus* Myocarditis and Polyarthritis in Cattle. American College of Veterinary Pathology Annual Meeting, Miami, Fl. January, 1992.

Potter, A.A. and R.J. Harland. 1992. Vaccination of Calves With Recombinant Leukotoxin. Miami Winter Symposium, January, 1992, Miami, Fl.

Harland, R.J., Potter, A.A., v.D.L-van den Hurk, S.L., Van Donkersgoed, J., Parker, M.D., Zamb, T., and E.D. Janzen. 1991. A Field Efficacy Trial of a Recombinant *Pasteurella haemolytica* Vaccine and the Effect of Subunit or Modified Live BHV-1 Vaccines. Conference for Research Workers in Animal Disease, November, 1991, Chicago, Il.

Willson, P.J., Rossi-Campos, A. and A.A. Potter. 1991. Effect of Adjuvant on Tissue Reactions in Swine Immunized With *Actinobacillus pleuropneumoniae* Vaccines. Conference for Research Workers in Animal Disease, November, 1991, Chicago, Il.

Rossi-Campos, A., Anderson, C., Gerlach, G.F., Klashinsky, S., Potter, A.A. and P.J. Willson. Immunization of Pigs Against *Actinobacillus pleuropneumoniae* With Two Recombinant Protein Preparations. Conference for Research Workers in Animal Disease, November, 1991, Chicago, Il.

Gerlach, G.F., Anderson, C., Potter, A.A., Klashinsky, S. and P.J. Willson. 1991. Cloning and Expression of a Transferrin-binding Protein From *Actinobacillus pleuropneumoniae*. Conference for Research Workers in Animal Disease, November, 1991, Chicago, Il.

Theisen, M. and A.A. Potter. 1991. Cloning and Expression of a Gene Coding for a Major Outer Membrane Protein of *Haemophilus somnus*. Congress of Clinical Microbiology, August 1991, Oslo, Norway.

Hughes, H.P.A., Campos, M., Potter, A.A., van D-L-van den Hurk, S., Zamb, T. and L.A. Babiuk. 1991. Molecular Chimeras or Mixtures of Interleukin-2 With Antigen Modulate Antigen-specific Responses by Enhanced T-Cell Activation. Symposium on Lymphokine Research, November, 1991, Italy.

Potter, A.A. and R.J. Harland. 1991. Development of a Vaccine for *Pasteurella haemolytica*. CBDN Symposium on New Approaches to the Therapy and Diagnosis of Bacterial Diseases, July, 1991, Vancouver, British Columbia, Canada (invited speaker).

Harland, R.J. and A.A. Potter. 1991. A New Generation of Vaccines for the Prevention of Respiratory Disease in Cattle. WCVN Diploma Course, June 1991, University of Saskatchewan, Saskatoon, Saskatchewan.

Allan, B.J., Van Den Huk, J.V., Riddell, C. and A.A. Potter. 1991. Prevention of Colisepticemia in Turkeys by Oral Immunization With *E. coli*. Canadian Society of Microbiologists Annual Meeting, June, 1991, London, Ontario, Canada.

Anderson, C., Gerlach, G.-F., Potter, A.A., Klashinsky, S. & P. Willson. 1991. Molecular Characterization of an *Actinobacillus pleuropneumoniae* Serotype 7 Cytolysin Gene. American Society for Microbiology Annual Meeting, May, 1991, Dallas, Texas, U.S.A.

Harland, R.J., Potter, A.A. & L.A. Babiuk. 1991. Application of Biotechnology to the Improvement of Animal Health: National Centres of Excellence Program. April 30, 1991, University of Saskatchewan, Saskatoon, Saskatchewan.

Harland, R. & A.A. Potter. 1991. Development of Vaccines for Feedlot Cattle. Livestock Update '91, February 1991, Saskatoon, Saskatchewan, Canada.

Allan, B. & A.A. Potter. 1990. Characteristics of Avian *E. coli* Strains from Western Canada. Conference for Research Workers in Animal Disease, November, 1990, Chicago, Il, U.S.A.

Harland, R., Schuh, J. & A.A. Potter. 1990. Development of an Experimental Challenge Model for *Haemophilus somnus*. Conference for Research Workers in Animal Disease, November, 1990, Chicago, Il, U.S.A.

Theisen, M. & A.A. Potter. 1990. Cloning of an *H. somnus* gene coding for a 15 KD Protein. Conference

Potter, A.A., Fodor, K. & Lawman, M.J.P. 1990. Identification of a plasmin receptor on *Pasteurella haemolytica*. IUMS Congress: Bacteriology & Mycology, September, 1990, Osaka, Japan.

Potter, A.A. and R.J. Harland. 1990. Development of a recombinant subunit vaccine for *Pasteurella haemolytica*. American Society for Microbiology Conference on Biotechnology, June 1990, Chicago, IL, U.S.A.

Van Den Hurk, J.V., Allan, B., Riddell, C. and A.A. Potter. 1990. The effect on *E. coli* susceptibility of turkeys following exposure to hemorrhagic enteritis virus. North Eastern Avian Disease Conference, June, 1990, Guelph, Ontario, Canada.

Styrt, B., Walker, R.D., Dahl, L.D. and A.A. Potter. 1989. Time-dependence of bovine granulocyte damage by crude and purified *Pasteurella haemolytica* leukotoxin. Conference of Research Workers in Animal Disease, November, 1989, Chicago, IL, U.S.A.

Potter A.A., Deneer, H.G., Harland, R.J. and M. Campos. 1989. Protective capacity of a 50,000 dalton outer membrane protein from *Pasteurella haemolytica* against experimental infection. *Haemophilus, Actinobacillus* and *Pasteurella* (HAP) Meeting, June, 1989, Guelph, Ontario.

Campos, M., Rossi-Campos, A., Potter, A., Harland, R., Bielefeldt, H., Sordillo, L., Martinod, S., Peel, J., and L.A. Babiuk. 1989. The use of cytokines on acute bacterial infections. Second International Veterinary Immunology Symposium, July, 1989, Hanover, Germany.

Campos, M., Rossi-Campos, A., Potter, A., Harland, R., Bielefeldt Ohmann, H., and L.A. Babiuk. 1989. Parenteral administration of interferons protects pigs from acute death caused by the Gram-negative bacterium *Actinobacillus (Haemophilus) pleuropneumoniae*. Second Veterinary Immunology Symposium, July, 1989, Hanover, Germany.

Tomcik, K., Gilchrist, J., Potter, A., Deneer, H., Klashinsky, S., and P. Willson. 1988. Pilus-like structures on *Actinobacillus pleuropneumoniae*. Conference of Research Workers in Animal Disease, November, 1988, Chicago, IL, U.S.A.

Deneer, H.G. and A.A. Potter. 1988. Iron-repressible outer membrane proteins of *Actinobacillus (Haemophilus) pleuropneumoniae*. American Society for Microbiology Annual Meeting, May, 1988, Miami, Florida.

Deneer, H.G. and A.A. Potter. 1988. Characterization of outer membrane proteins of *Actinobacillus pleuropneumoniae*. Canadian Vet. Med. Assoc. 40th Annual Meeting, Saskatoon, Sask., June, 1988.

Lawman, M.J.P., Potter, A.A., Gyongyossy-Issa, M., Heise, J., and L.A. Babiuk. 1987. Chemotactic components of *Pasteurella haemolytica* outer cell wall: Two distinct chemotactic factors with different specificities. Conference of Research Workers in Animal Disease, November, 1987, Chicago, IL, U.S.A.

Potter, A.A., Ready, K., and J. Gilchrist. 1987. Purification and characterization of fimbriae from *Pasteurella haemolytica*. International Symposium on Virulence Mechanisms of Veterinary Bacterial Pathogens, June, 1987, Ames, Iowa.

Gifford, G.A., Potter, A.A., and L.A. Babiuk. 1987. Clinical and pathological evaluation of sulbactam/ampicillin for treatment of experimental bovine pneumonic pasteurellosis. World Veterinary Congress, August, 1987, Montreal, Canada.

Deneer, H.G. and A.A. Potter. 1987. Iron-regulated outer membrane proteins of *P. haemolytica*. Canadian Society of Microbiologists Annual Meeting, June, 1987, Saskatoon, Canada.

Winsor, B., Potter, A.A., Karst, F., Nestmann, E.R., and F. Lacroute. 1986. Characterization of the yeast mutation *ise-1* that enhances permeability of *Saccharomyces cerevisiae*. Annual Meeting of the Environmental Mutagen Society, February, 1986, Santa Barbara, CA.

Potter, A.A., Nestmann, E.R., and V.N. Iyer. 1984. Transfer of the pKM101-associated *muc* genes to *Saccharomyces cerevisiae*. 15th Annual Meeting of the Environmental Mutagen Society, February, 1984, Montreal, Canada.

Potter, A.A. 1983. Applied genetics and biotechnology. National Research Council of the Philippines Symposium on Microbiology, October 27, 1983, Los Banos, Philippines. (invited speaker)

Potter, A.A. 1983. Prospects for the genetic manipulation of plants. National Research Council of the Philippines Symposium on Genetics, October 19, 1983, Dilliman, Quezon City, Philippines. (invited speaker)

Potter, A.A., Nestmann, E.R., and V.N. Iyer. 1983. Transfer of the pKM101-associated *muc* genes to *Saccharomyces cerevisiae*. Cold Spring Harbor Yeast Meeting, August, 1983, Cold Spring Harbor, New York.

Harrington, T.R., Nestmann, E.R., Kowbel, D.J., and A.A. Potter. 1983. Induction by N-methyl-N'-nitro-N-nitrosoguanidine of mutation and killing in *Escherichia coli* fluctuation assays. Genetics Society of Canada Annual Meeting, June, 1983, Ottawa, Canada.

Potter, A.A., Nestmann, E.R., and V.N. Iyer. 1983. Transfer of the pKM101-associated *muc* genes to *Saccharomyces cerevisiae*. Genetics Society of Canada Annual Meeting, June, 1983, Ottawa, Canada.

Harrington, T.R., Nestmann, E.R., Kowbel, D.J., and A.A. Potter. 1983. Induction by MNNG of mutation, error-proof repair, and error-prone repair in *E. coli* fluctuation assays. 5th Mutagenesis Meeting, York University, May, 1983. (invited paper)

Potter, A.A. and J.S. Loutit. 1981. Purification and partial characterization of a new *Pseudomonas* exonuclease. New Zealand Society for Microbiologists Annual Meeting, May, 1981, Auckland, New Zealand.

Potter, A.A. and J.S. Loutit. 1980. Thymine metabolism in *Pseudomonas aeruginosa*. Joint meeting of the Australian and New Zealand Societies for Microbiologists, May, 1980, Dunedin, New Zealand.

#### OTHER PRESENTATIONS



- Potter, A.A. 1998. Iron acquisition by veterinary bacterial pathogens. University of Saskatchewan, Department of Veterinary Microbiology seminar series, January, 1998.
- Potter, A.A. 1997. Veterinary bacterial vaccines. University of Saskatchewan, Department of Veterinary Microbiology special CE seminar series, June, 1997.
- Potter, A.A. 1995. *Haemophilus somnus* virulence determinants. University of Saskatchewan, Department of Medical Microbiology seminar series, February, 1996.
- Potter, A.A. 1995. Iron acquisition mechanisms of veterinary bacterial pathogens. University of Minnesota, Department of Pathobiology seminar series, October, 1995.
- Potter, A.A. 1995. *Haemophilus somnus* pathogenesis. University of Guelph, Department of Microbiology seminar series, February, 1995.
- Potter, A.A. 1994. Pathogenesis of *Haemophilus somnus* infection. University of Saskatchewan, Department of Veterinary Microbiology seminar series.
- Potter, A.A. 1994. Vaccines for *Pasteurella haemolytica* infection in ruminants. National Research Council of Canada seminar series.
- Potter, A.A. 1993. Pathogenesis of *Haemophilus somnus* infection in cattle. University of Alberta, Department of Microbiology seminar series.
- Potter, A.A. 1990. *Pasteurella haemolytica* virulence determinants. University of Saskatchewan, Department of Medical Microbiology seminar series.
- Potter, A.A. 1988. Virulence determinants of *Pasteurella haemolytica* - implications for vaccine development. University of Nebraska (Lincoln), Department of Veterinary Microbiology seminar series.
- Potter, A.A. 1985. *DnaB* analog genes associated with bacterial plasmids. University of Saskatchewan, Department of Veterinary Microbiology seminar series.
- Potter, A.A. 1984. Expression of the pKM101-associated *muc* genes in *Saccharomyces cerevisiae*. University of Manitoba, Department of Genetics.
- Potter, A.A. 1984. Phenotypic effects of expression of bacterial DNA repair genes in yeast. Carleton University, Department of Biology.
- Potter, A.A. 1984. *DnaB* analogs associated with bacterial plasmids. McMaster University, Department of Microbiology.

## RESEARCH GRANTS & CONTRACTS

Van Donkersgoed, J., Drake, T., Potter, A.A. and Vanderkop, M. \$72,000 per year, 1998-1999. The Effectiveness of Viral and Bacterial Vaccines in Beef Calves at Spring Processing. Canada-Alberta Beef Development Research Program. (Applied January 1998)

Potter, A.A. and B. Finlay. Beef Industry Development Fund, \$100,000 per year, 1997-1999. Prevention of *E. coli* O157 colonization by vaccination.

Potter, A.A., Willson, P. and P.R. MacLachlan. \$100,000 per year, 1998-2000. Bovine Mastitis Vaccines. Dairy Farmers of Canada Matching Grants Program. (Approved pending matching funds, December 1997).

Potter, A.A. & L.A. Babiuk. Natural Sciences and Engineering Research Council of Canada, National Center of Excellence Program, Bacterial Diseases Network, \$186,000 per year, 1998-2005. Streptococcal vaccines; Live attenuated vectors for vaccination of poultry.

Potter, A.A. Saskatchewan Agriculture Development Fund, \$70,000, 1997. Vaccine potential of bacterial heat shock proteins.

Potter, A.A. et al. Natural Sciences and Engineering Research Council Equipment Grant, \$71,000, 1997. Purchase of an ultracentrifuge.

Potter A.A. Natural Sciences and Engineering Research Council of Canada, Operating Grant, \$25,000 per year, 1997-2001. Virulence Determinants of *Streptococcus dysgalactiae*.

Potter, A.A. & L.A. Babiuk. Natural Sciences and Engineering Research Council of Canada, National Center of Excellence Program, Bacterial Diseases Network, \$832,295 over four years, 1994-1998. Iron acquisition mechanisms in *Pasteurella haemolytica* and *Haemophilus somnus*; Live attenuated vectors for vaccination of poultry.

Potter, A.A. and S. Tikoo. Agriculture Canada/Natural Sciences and Engineering Research Council of Canada, University - Industry Research Grant, \$45,000 per year, 1994-1997. Vaccines for Bovine Respiratory Disease.

Babiuk, L.A., Potter, A.A., Hughes, H., Liang, X. and M. Campos. Agriculture Canada/Natural Sciences and Engineering Research Council of Canada, University - Industry Research Grant, \$100,000 per year, 1992-1995. Development of Antigen Delivery Systems.

Potter, A.A. Alberta Agricultural Research Council, Matching Grants Program, \$40,000 per year, 1993-1996. Development of a Vaccine for *Streptococcus dysgalactiae* Mastitis in Dairy Cows.

Potter, A.A. Natural Sciences and Engineering Research Council of Canada, Operating Grant, \$25,000 per year, 1993-1996. Virulence Determinants of *Streptococcus dysgalactiae*.

Potter, A.A. Agriculture Canada/Natural Sciences and Engineering Research Council of Canada, University - Industry Research Grant, \$75,000 per year, 1992-1995. Development of Subunit Vaccines for bovine mastitis.

Potter, A.A. & L.A. Babiuk. Natural Sciences and Engineering Research Council of Canada, National Center of Excellence Program, Bacterial Diseases Network, \$75,000 per year, 1992-1994. Lipid-modified peptides as vaccine components.

Willson, P. and A.A. Potter. Alberta Agricultural Research Institute, \$47,150 per year, 1991-1993. Development of a *Streptococcus suis* type II animal model and testing of vaccine components.

R. Harland, A. Potter & T. Zamb. Saskatchewan Agriculture Development Fund, \$102,000 per year, 1990-1992. Development and testing of new *Haemophilus somnus* and BVD vaccines.

Potter, A.A. Natural Sciences and Engineering Research Council of Canada, Operating Grant, \$26,500 per year, 1990-1993. Virulence Determinants of *Haemophilus pleuropneumoniae*. (Renewal).

Potter, A.A. & L.A. Babiuk. Natural Sciences and Engineering Research Council of Canada, National Center of Excellence Program, Bacterial Diseases Network, \$832,295 over four years, 1990-1994. Iron acquisition mechanisms in *Pasteurella haemolytica* and *Haemophilus somnus*.

L.A. Babiuk, T.J. Zamb & A.A. Potter. Natural Sciences and Engineering Research Council of Canada, Strategic Grant, \$115,000 per year, 1990-1993. Control of bovine respiratory disease complex: development of novel vaccine alternatives.

R.J. Harland & A.A. Potter. Alberta Agriculture, Farming for the Future Program, \$50,000 per year, 1989-1992, Prevention and control of *Haemophilus somnus* in feedlot calves.

Potter, A.A. Agriculture Canada/Natural Sciences and Engineering Research Council of Canada, University - Industry Research Grant, \$150,000 per year, 1989-1992. Development of a Subunit Vaccine for *Haemophilus somnus*.

Potter, A.A. & J. van den Hurk. Alberta Agricultural Research Institute, Matching Grants Program, \$38,600 per year, 1989-1992. Development of a Vaccine for Colisepticemia in Turkeys.

Potter, A.A. Ontario Ministry of Agriculture and Food, Research Contract, \$100,809 per year, 1987-1990. Development of a Subunit Vaccine for *Haemophilus pleuropneumoniae*.

Potter, A.A. Natural Sciences and Engineering Research Council of Canada, Operating Grant, \$24,500 per year, 1987-1990. Virulence Determinants of *Haemophilus pleuropneumoniae*.

Potter, A.A. Department of Health & Welfare, Research Contract, \$36,000 per year, 1985-1986. Cloning of the *ise-1* Gene of *Saccharomyces cerevisiae*.

### Postdoctoral Fellows Supervised

Dr. H. J. J. ... 1986-1989. Cloning of a gene from the University of Saskatchewan. Department

Dr. Katalin Fodor. 1989-1991. Currently a research scientist at the Hungarian Academy of Sciences.

Dr. Michael Theisen. 1989-1991. Currently a research scientist at the Statens Serumintitut, Copenhagen, Denmark.

Dr. Brenda Allan. 1989-1992. Currently a research scientist at VIDO, University of Saskatchewan.

Dr. Jacob Kwaga. 1992-1994. Currently working as a research scientist in Nigeria.

Dr. Alexandra Bolton. 1996-present.

Dr. Robert Brownlie. 1996-1997.

### **Graduate Students Supervised**

Elaine Tanaka. 1987-1991. M.Sc. supervisor.

Hong Sheng Huang. 1989-1995. Ph.D. co-supervisor.

Tom Pfeifer. 1988-1992. Ph.D. committee member.

Cheryl Pfeifer. 1990-1992. M.Sc. supervisor.

Reno Pontarollo. 1990-1995. Ph.D. supervisor.

Min Jiang. 1991-present. Ph.D. supervisor.

Susantha Gomis. 1992-1996. Ph.D. co-supervisor.

Graham Cox. 1994. Ph.D. committee member.

Sunil Khattar. 1993-1994. Ph.D. committee member

Nina Petchpud. 1996-present. Ph.D. supervisor.